WHERE IS IT IN THE PARK?
AP Physics Edition

Describe at least one place at California's Great America that fits each of the descriptions below. The same ride may be used more than once, or not at all. Some descriptions may be met at a location other than a ride. Be sure to describe the location fully, don't just give the name of the ride - tell where on the ride this occurs. (Bold letters indicate **vectors**!)

Example: d**v**/dt is zero, but the rider is moving:

When you are coasting at a steady speed into the offloading area of ***The Demon***

1. d**v**/dt is greater than 1 g:

2. d**v**/dt is less than 1 g but not 0:

3. d**p**/dt is in the forward direction:

4. d**p**/dt is in the backward direction:

5. $\int \mathbf{F} \cdot d\mathbf{s} > 0$:

6. $\int \mathbf{F} \cdot d\mathbf{s} < 0$:

7. Energy from other forms is being converted into Heat:

8. The longitudinal acceleration is negative:

9. The seat furnishes Centripetal Force to the rider:

10. The restraint system furnishes Centripetal Force to the rider:

11. Gravity contributes to the Centripetal Force:

12. A place where the effects of μ_k are quite apparent: